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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,844	01/23/2002	Takeshi Kai	KPO-108-A	7883

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EXAMINER

CULBRETH, ERIC D

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,844

Applicant(s)

KAI ET AL.

Examiner

Eric D Culbreth

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 23 January 2002 is: a) ☐ approved b) ☒ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 & 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892 or initialed on a form PTO-1449, they have not been considered.

This refers to the references cited in the specification on pages 2-4.

Drawings

2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 1/23/02 have been disapproved because reference numeral 6 would then refer to two different parts of the invention (the circle region in Figure 19, but also the main body in Figure 7, which is improper). A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

3. The drawings are objected to because of the following informalities. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

a. In Figure 2, reference character a has no lead line or is not underlined.

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b. In line 6 of the amended paragraph at page 13, line 21, “a” should be “a1, a2, a3” to be consistent with the drawings (a is an arrow in Figure 2).

c. As noted above reference numeral 6 refers to a circle region at page 22, line 11 but referred to the main body earlier in the specification; a reference numeral should only refer to one part of the invention.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the acceleration sensor (claims 1, 13, 20 and 25) and the bag with a protrusion section and partition (beginning at claim 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The abstract of the disclosure is objected to because contrary to the last sentence of the abstract, there is no disclosure that the bag can include the protrusion section and a partition at the same time (these are different embodiments in the specification). Correction is required. See MPEP § 608.01(b).

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6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

7. The disclosure is objected to because of the following informalities.

Appropriate correction is required.

a. In the amended paragraph on page 8, lines 2-11 the second sentence of that paragraph is an incomplete sentence.

b. In line 8 of the paragraph as amended beginning at page 13, line 21 "are spouted" should be "is spouted".

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 6-12, 14-15, and 25-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claim 6, it is not understood what is meant by "a limb portion" (i.e., is this the periphery of the bag?). Note also claim 14 and claim 25.

b. Claim 7 is indefinite because it recites features of the embodiments in Figures 12-21, but depends from claim 1, which recites features exclusively found in Figures 4-11. There is

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no one embodiment disclosed that has features of both embodiments, and there is no disclosure in the specification that the embodiments can be used together.

c. Similarly, claims 8-12 recite features of embodiments not used with the embodiment of Figure 1 from which it ultimately depends.

d. In claim 8 there is no antecedent basis for “said first and second side panels” (these were recited in claim 6, and claim 8 depends from claim 7 which does not depend from claim 6).

e. In claim 15, there is no antecedent basis for “said first and second side panels”.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 13-19 and 25-29 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 10-175497 (cited by applicant).

Japanese '497 discloses an air bag apparatus for side crash comprising an acceleration sensor in a side direction larger than a predetermined value and generating a signal (page 3, paragraph [0020] and page 5, paragraph [0032] of the English translation submitted with the reference, where an inflator generates gas when an acceleration sensor detects a side collision, at which point an acceleration would be occurring in a side direction above a predetermined value),

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and an inflator 21 generating gas. The air bag is folded initially (in order to fit in the seat back in Figure 3) and expands with gas. The bag 22 has at least one partition 40 in the inner space. As seen in Figures 5-8, the bag is formed of panels sewn together on a periphery as best understood, and the partition is formed by sewing predetermined portions of side panels (claims 13-15 and 25-26). Regarding claims 16-19 and 27-29, the predetermined portion may be shaped as a semicircle, which is a curved line (Figure 5) or a circle (Figure 7), and as functionally recited the predetermined portion 40 determines an expansion direction of the bag during the expansion process.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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14. Claims 1-3, 6-12, and 20-22 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese '497 in view of Japanese Patent 49-116743 (cited by applicant).

Japanese '497 discloses (claim 1) an air bag apparatus for side crashes comprising an acceleration sensor activating an inflator above a predetermined value of acceleration (see rejection above), and a bag folded initially as noted above expanding with gas, but does not teach a protrusion with an opening spouting gas on the main section of the bag. Japanese '743 discloses a protrusion 3 on a main section 2 of an air bag with an opening for spouting gas. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Japanese '497 to include a protrusion section with an exhaust opening as taught by Japanese '743 in order to relieve pressure as the occupant falls into the bag. In the combination the protrusion is pipe shaped with openings at opposing ends (one end having an opening spouting gas and the other end having an opening connecting with the air bag main section) (claims 2-3 and 20-22). As noted in the rejection above, Japanese '497 teaches a limb portion of side panels sewn together as best understood (claim 6), as well as the partitions directing gas during inflation indefinitely recited in claims 7-12.

15. Claims 4 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese '497 in view of Japanese '743 as applied to claims 1 and 20 above, and further in view of Japanese Patent 9-315245 (cited by applicant).

In Figure 7, Japanese '245 discloses vent 23 folded inside or pushed into as functionally recited the inner section of the main air bag prior to expansion. It would have been obvious to

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one of ordinary skill in the art at the time the invention was made to modify Japanese '497 and Japanese '743 to include the exhaust port (which in the combination is formed by the protrusion section) in the bag when folded prior to expansion as taught by Japanese '245 in order to compact the bag for storage.

Allowable Subject Matter

16. Claims 5 and 24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nanbu et al, Denz et al and Wallner et al show circular connections for side panels.

Okumura et al shows curved connections for side panels.

Nakamura et al shows vent holes folded into a side air bag.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 703/308-0360. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703/746-3508 for regular communications and 703/308-2571 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Eric D Culbreth
Primary Examiner
Art Unit 3616

Eric Culbreth
6/30/03

ec
June 30, 2003